A ROAD TO LEM LEM (GREEN) REVOLTION

By: C.S.H.N.MURTHY,
ASSISTANT PROFESSOR,

b. Floriculture: For worshipping and decoration and for Garlands and Tributes.

The gigantic variety of flowers, especially of the families of Compositae, Labiate, Euphorbiaceae, and Rosaceae bewildered me in addition to usual flowers of Malvaceae, Leguminaceae, and Convolvulaceae. The plants of these families are found in cosmopolitan distribution and bear very beautiful flowers with a size ranging from a tiny star to very large size-that of Sun-flower (Helianthus). Having such a vast source of flowers, even during the less rainy seasons, it is a matter of wonder there is no effort to convert this into a commercial venture for the benefit of the poor people of the country. What all I saw here in so far utilizing these flowers is to use one or two varieties, especially roses, in boques. On the other hand in India, flowers are extensively used in the worship of God, be it Hindu, or Muslim or Christian faith, in the decoration of stages of the Marriages and Bridal party vehicles, in the preparation of garlands and in the decoration of hair of the women. As such the flowers are being sold by the hawkers and small scale vendors on the roadside also and make good money out of it a day. They are also sold on large scale near temples, masjids or mosques, and churches. Even small children keep flowers on their suit buttons while attending the schools either on regular days or on special occasion.

In India, a festival occasion or a celebration of a national holiday hardly misses the presence of the flowers. Even the tributes to the national heroes are paid by offering the petals of a variety of flowers including roses. There are many plants, which offer scented flowers and are being cultivated exclusively for this purpose. When worshipping of God of any religion, using flowers and garlands, is permitted both in the East and the West, I just do not see ignoring such valuable products of nature is a wise step, especially when the Government is not sparing a single stone unturned in boosting both nation's as well as individual economy and employment opportunities. Floriculture has immense potential of generating alternate forms of livelihood certain sectors in the society given proper spread of messages to that effect by looking at the experiences of the countries like India, China, and Japan or the Europe or US.

Especially it is pertinent to add that there are a number of variety of flowers which emanate a powerful scent smell, like Indian Jasmine or Lilies, which can outwit any scents of the East or the West besides being beautiful and fragile. These are produced both as garlands and bunches to meet various occasions of festivals, marriages, bridal decorations and official functions. As such this is still an unknown concept in Eritrea. Further great varieties of Chrysanthemum of Composite are not yet cultivated, though Eritrea seems to be a bed of Compositae families in its range of producing small to large flowers like Helianthus. But the missing of typical Indian variety of Chrysanthemum both big and moderate sizes are a great lacuna. Without much effort these could be brought under cultivation for commercial purposes.

c. Baby Food Products, Nutritional Supplements, Sweets and Cosmetic Powders

A cursory look at the huge pile of stocks of grains in the grain markets, whether imported or indigenous, and the prices tagged to them show how costly millets, cereals, pulses, and nuts here are. Firstly, these are the crops, which could be grown in the semi-arid tropics like the lowlands of Eritrea. Even the drylands of the Upper Highlands could also be effectively exploited for the production of these. Given the vast expanse of the land compared to the density of population per square kilometer, there should not be any limitation for the farmers and the poor peasants to take up extensive cultivation of these dryland crops. Further the modern technology has made even conversion of deserts into green belt zones a possibility and a reality.(E.g.Jai Salmer of Rajasthan's Desert has today turned into a green zone). This apart, the International Crop Research Institute in Semi-Arid Tropics (ICRISAT) which is located just a few hundred kilometers from here across in Mali, has done a lot of research both in India and elsewhere to fully exploit the dryland for the cultivation of Sorghum, Maize, Pulses such as Legumes, Ground Nuts, Sesame, Mustard, Barley, etc. They could bring the revolution in dryland and semi-arid land farming mostly by spreading the messages of their findings among farmers and peasants through a lot of communication efforts such as booklets, leaflets, brochures and through agricultural extension services.

The larger the cultivation, the greater the question as to how to utilize these products within Eritrea without engendering serious loss to the farmer and the peasant. The fact that all the above crop yields are of high nutritional value and have many fold utility. Firstly they could be utilized as staple food, though Ingera is one traditionally prepared by these products by Eritreans. Secondly all these could be powdered at domestic level and mixed with

Part II and final

Milk or Water with a modicum of sugar and made tasty. These powders could be fed to the infants, mothers both before and after pregnancy and growing children as additional supplements to meet their balanced nutritional requirements. The pastes of these powders could as well be used as baby foods as a supplement to mother's breast milk. They could be utilized to prepare different kinds of Chapatis or Rotis, like the ones made of Wheat by Indians, and could be taken as breakfast. Further except cake market, there are no sweets which Indian market developed over years from traditional preparation to commercial ventures.

All the pulses, grains, millets, and nuts are largely consumed in sweet Industry. Further some of these powders could be utilized as cosmetics by applying their paste to the skin. Especially rural women in India protect their skin from natural vagaries by using these pastes. Moreover, latest research on Ayurvedic sciences and traditions in India opened up new form of combinations of these powders to enhance the skin care, skin beauty especially from the cosmetic angle (eg facials). Today several industrial houses beginning with Hindustan Lever Limited to Himalayan Herbals Ltd are running business houses employing millions of people in the production, research and marketing in India and across the world.

d.Afforestation: Agroforestry, Social Forestry and Village Forestry

This is an important strategy to capture monsoon, prevent soil erosion, and bring up the underground water table to surface level. This could be taken up as a social campaign at the national level to bring most of the open land under green belt zone. There are plants like Ficus bengalensis (Indian Banyan tree), Morgosa (Neem) Tamarind and Ficus indica, besides Eucalyptus, which can bring up the underground water to the surface layers, prevent soil erosion and change the soil texture due to dropping of heavy foliage seasonally. These trees would weather any hard climatic conditions and grow into heavy, tall trees that spread over hundreds of square kilometers. In my latest visit to Mainefhi I found Morgosa (Neem) plants being planted near the campus of the Eritrean Institute of Technology. It is matter of State policy, which decides the growing of these plant seedlings entire area every inch of it including alongside the roads down to Keren, Neffassit and Massawa. They would provide safety, shelter and attract monsoon rains. Cultivation of these plants could be taken up by schools, youth of the colleges and universities on every important national event or religious event.

Every student, child or citizen on his or her birthday could plant a tree or a sapling at his or her choicest place to mark the beginning of converting Eritrea into a green belt. This would lead to reduction in high temperatures on the lowlands too. When these plants are grown, as part of afforestation at village level, it is called Village Forestry. Around the villages, these trees could be grown on a large scale by the villagers themselves as a social campaign.. The Village would gain a lot by its foliage, which becomes excellent organic manure and by its timber that could be used for furniture-architecture as well. When this afforestation is combined with commercial produce like tarmarind it would benefit the villagers economically too. Similarly when this is grown the entire area of the village both alongside the roads, special parks or as protected forests or endangered forests, it would become Social Forestry. It would become a heaven for the forest animals such as deers, lambs, etc to live happily. Agroforestry would provide for sowing of the commercial or vegetable crops under the shade of these tall timber and foliage yielding trees.

e. Fiber Yielding Trees and Plants with by-prdoucts

The best plant for this category of agricultural development is Cocus nucifera (Indian coconut). It is a plant every part of which is very useful. It not only yields rich sweetwater-fruits of large size, the water of which is used as nutritional supplement to infants and adults alike, but also offers timber, foliage the veins of which could be used as broom sticks for cleaning the floors, roads, etc. besides fiber and oil. The Indian coconut powder and oil are both used in cuisine as also its oil for skin and hair care. Almost all the products of coconut tree are of manifold use including medicine especially in Ayurvedic and Unani schools of medicine. This apart, the cultivation of Eucalyptus under social or village forestry would be of immense help in the sense its leaves offer a natural organic manure, besides an oil that has immense potential as medicine for colds and digestive problems, body pains, etc., Its oil could be extracted under small scale category of industries too but could be exported.

As I write this many may think that being an Indian I am not yet aware of the geological or climatological conditions of Eritrea. To all those my humble answer is that though there may be truth in the above statement, to some extent I am aware of the environmental and soil conditions of Eritrea as I had the privilege of going through the report of RELMA on Soil and Water Conservation (a Technical Hand book NO. 29, 2002). However most of the findings and suggestions in this article are based on my notes. My motive is that I just want to see lem lem (green) everywhere— the hills, the valleys, the houses, the backyards-everywhere. I want the cottage industries spring up, employment potential increases and individual economy gains with these low investment and low capital activities. Then it is true lem lem in every Eritrean's life.

VACANCY ANNOUNCEMENT

The National Commission for Demobilization & Reintegration Programme (NCDRP) is looking for qualified candidate for the following posts.

I. Position:-	**Psychosocial counselor**	
Qualification:-	BA in sociology or psychology	
Experience:-	More than two years in related fields.	
Duty station	**Zoba**	
Other Skills:	Fluent in written & spoken English &Good Knowledge of computer applications	
II. Position:-	**Training officer**	
Qualification:-	BA in Educational Science/equivalent	
Experience:-	More than two years in related field of work.	
Duty station	**Zoba/Asmara**	
Other Skills:	Fluent in written & spoken English & Good knowledge of computer applications	
III. Position:-	**Accountant**	
Qualification:	Diploma in accounting from Commercial College.	
Experience:	Two years in related field	
Duty station	**Zoba**	
Other Skills:	Good knowledge of computer applications.	
Salary:-	Negotiable for all	

Interested applicants are invited to send their applications & CV with non-returnable photocopies of supporting documents to NCDRP through P.O. BOX 8160, Asmara not later than 10 days from this announcement. Please mark on your envelope the post you applied for.

N.B

✓ National service completion/ exemption paper is **requisite;**
✓ Applicants are required to attach copies of relevant documents;
✓ No hand delivery of applications;
✓ Only short listed candidates will be invited for an exam